Claims

1. A wireless signal receiving method in which after a physical channel sent from a base station in a wireless communication system at an unspecified timing is demodulated from a high frequency signal to a baseband signal, the baseband signal is decoded and is outputted as a decoded baseband signal, and

a desired channel included in the decoded baseband signal is decrypted by a communication control part for performing communication control, the wireless communication receiving method being characterized by comprising:

a judgment step of judging whether or not the desired channel exists in the physical channel of the decoded baseband signal and outputting a judgment result;

a wake-up step of bringing a power source of the communication control part into an ON state in a case where the judgment result indicates existence of the desired channel; and

a sleep step of bringing the power source of the communication control part into an OFF state when it is confirmed that the communication control part does not need to be operated in a case where the power source of the communication control part is in the ON state.

2. A wireless signal receiving method as recited in claim 1, characterized in that the wireless communication system is

a WCDMA system,

the physical channel is a SCCPCH, and the desired channel is an FACH.

3. A wireless signal receiving method as recited in claim 2, characterized in that the judgment step is performed using a TFCI decoded by the decoding part.

4. A wireless signal receiving method as recited in claim 2 or 3, characterized in that after the judgment, error detection of the judgment result is performed.

5. A wireless signal receiving method as recited in claim 4, characterized in that the error detection is made by a CRC judgment.

6. A wireless signal receiving method as recited in any one of claims 2 to 5, characterized in that at the wake-up step, in a case where the judgment result indicates the existence of the FACH, and when the SCCPCH is decoded, the power source of the communication control part is brought into the ON state by an interrupt signal.

7. A wireless signal receiving method as recited in claim 1, characterized in that the wireless communication system is a WCDMA system,

the physical channel is a DPCH, and the desired channel is a DTCH.

8. A wireless signal receiving method as recited in claim 7, characterized in that the judgment step is performed using

a TFCI decoded by the decoding part.

9. A wireless signal receiving method as recited in claim 7 or 8, characterized in that after the judgment, error detection of the judgment result is performed.

10. A wireless signal receiving method as recited in claim 9, characterized in that the error detection is made by a CRC judgment.

11. A wireless signal receiving method as recited in any one of claims 7 to 10, characterized in that at the wake-up step, in a case where the judgment result indicates the existence of the DTCH, and when the DPCH is decoded, the power source of the communication control part is brought into the ON state by an interrupt signal.

12. A wireless signal receiving method as recited in any one of claims 1 to 11, characterized in that the sleep step includes a confirmation step of confirming whether or not an operation instruction to the communication control part exists in a case where a decryption result of the communication control part indicates continuation of reception of the desired channel signal, and

a power supply stop processing step of bringing the power source of the communication control part into an OFF state in a case where the confirmation result indicates that there is no operation instruction.

13. A wireless signal receiving method as recited in

claim 12, characterized in that the confirmation step confirms one of whether or not there is a processing request from various terminals connected to the communication control part, whether or not information acquisition of a peripheral cell is necessary, and whether or not the information acquisition of the peripheral cell exists.

14. A wireless signal receiving apparatus in a wireless signal receiving method in which after a physical channel sent from a base station in a wireless communication system at an unspecified timing is demodulated from a high frequency signal to a baseband signal, the baseband signal is decoded and is outputted as a decoded baseband signal, and

a desired channel included in the decoded baseband signal is decrypted by a communication control part for performing communication control,

characterized by comprising:

judgment means for judging whether or not a signal of the desired channel exists in the physical channel of the decoded baseband signal and outputting a judgment result;

wake-up means for bringing a power source of the communication control part into an ON state in a case where the judgment result indicates existence of the desired channel; and

sleep means for bringing the power source of the communication control part into an OFF state when it is confirmed

that the communication control part does not need to be operated in a case where the power source of the communication control part is in the ON state.